



Nicholas A. Toumpas
Commissioner

José Thier Montero
Director

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND
HUMAN SERVICES

29 HAZEN DRIVE, CONCORD, NH 03301-6527
603-271-4496 1-800-852-3345 Ext. 4496
Fax: 603-271-0545 TDD Access: 1-800-735-2964



Response to Excessive Heat Conditions – Heat-Related Illness

As the Heat Index rises, so do health risks. It is important to recognize the early signs of heat-related illnesses and know what to do about them. During normal weather, the body's internal thermostat produces perspiration that evaporates and cools the body. However, during periods of extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature. If the body cannot cool itself, serious illness can result. Those who are susceptible (e.g. infants, children, the elderly, those with mental illness or chronic illness) are less able to sweat or regulate their internal temperatures than others, and have increased risk of experiencing a range of potential adverse health outcomes.

Table 1 below lists the more serious medical conditions directly attributable to excessive heat exposure, along with recommended responses.

Table 1. Medical conditions directly attributable to excessive heat exposure

Medical Condition	Symptoms	Responses
Heat cramps	Painful muscle cramps and spasms, usually in muscles of legs and abdomen. Heavy sweating.	Apply firm pressure on cramping muscles or gently massage to relieve spasm. Give sips of water; if nausea occurs, discontinue water intake. Consult with a clinician or physician if individual has fluid restrictions (e.g., dialysis patients).
Heat Exhaustion	Heavy sweating, weakness, cool skin, pale, and clammy. Weak pulse. Normal temperature possible. Possible muscle cramps, dizziness, fainting, nausea, and vomiting.	Move individual out of sun, lay him or her down, and loosen clothing. Apply cool, wet cloths. Fan or move individual to air-conditioned room. Give sips of water; if nausea occurs, discontinue water intake. If vomiting continues, seek immediate medical attention. Consult with a clinician or physician if individual has fluid restrictions (e.g., dialysis patients).
Heat stroke (sunstroke)	Altered mental state. Possible throbbing headache, confusion, nausea, and dizziness. High body temperature (106°F or higher). Rapid and strong pulse. Possible unconsciousness. Skin may be hot and dry, or patient may be sweating. Sweating likely especially if patient was previously involved in vigorous activity.	Heat stroke is a severe medical emergency. Summon emergency medical assistance or get the individual to a hospital immediately. Delay can be fatal. Move individual to a cooler, preferably air-conditioned, environment. Reduce body temperature with a water mister and fan or sponging. Use air conditioners. Use fans if heat index temperatures are below the high 90s. Use extreme caution. Remove clothing. If temperature rises again, repeat process. Do not give fluids.

Sources: CDC, 2004a; Kunihiro and Foster, 2004; NWS, 2004.

Table 2 below lists other heat-related, but less severe, conditions attributable to heat or sun exposure, along with recommended responses.

Table 2. Less severe heat-related conditions attributable to heat or sun exposure

Condition	Symptoms	Responses
Heat rash (prickly heat)	A skin irritation caused by excessive sweating during hot humid weather. Most common in young children, although can occur at any age. The rash looks like a red cluster of pimples or small blisters and is most common in the neck and upper chest, in the groin, under the breasts, and in elbow creases.	Move individual to a cooler place and keep the affected area dry. Use a dusting of talcum powder to increase comfort. Usually does not require medical assistance.
Sunburn	Damage to the skin caused by too much sun exposure. The skin becomes red, painful, and warm. Blisters may develop.	Medical attention should be sought if the sunburn affects an infant or if there is fever, fluid-filled blisters, or severe pain. Otherwise, the person should avoid sun exposure, apply cold compresses or immerse the burned skin in cool water, apply moisturizing lotion to the burn, and avoid breaking the blisters.